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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/920,665	07/31/2001	Raffi Codilian	K35A0863	6760

26332 7590 01/30/2004

WESTERN DIGITAL CORP.  
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LAKE FOREST, CA 92630

EXAMINER
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SNIEZEK, ANDREW L

ART UNIT	PAPER NUMBER
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2651

DATE MAILED: 01/30/2004

6

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/920,665

Applicant(s)

CODILIAN ET AL.

Examiner

Andrew L. Snizek

Art Unit

2651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 7, 8, 10 and 11 is/are rejected.
- 7) ☒ Claim(s) 4, 6 and 9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Art Unit: 2651

## **DETAILED ACTION**

### ***Drawings***

1. Figures 1-5 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Conventional arrangements are deemed to be arrangements that are well known (prior art).

### ***Information Disclosure Statement***

2. The information disclosure statement filed 7/31/01 has been considered.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 2, 7 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Szita et al. (US 2001/0040752 A1)

Szita et al. teaches a disk drive comprising a (HDA) containing at least one disk and a head stack assembly with a write head and a read head (see figure 1 along with

Art Unit: 2651

page 4, DETAILED DESCRIPTION. As seen from figure 8 a method is disclosed that measures the width of the read and write elements while in a servo track writer (steps 802-804 along with description of figure 8 on page 7). This information is then used in step (805) to determine the proper track pitch (distance between tracks) so that the writing of servo information is performed at the proper location in step (806). This teaching satisfies the limitations of claim 7. The limitations of claim 8 are satisfied by discussion of figure 3 on page 5. Claim 1 although written as a method of manufacturing a disk drive sets forth similar limitations as set forth in claim 7 which were discussed above and further sets forth mounting the HDA in a servo track writer. This feature is satisfied by step (802) in figure 8. The limitations of claim 2 directed to a processor that is used in the determination of the head widths is deemed satisfied by page 7 of Szita et al. with the discussion of the HDA being connected to the self-propagating electronic control system as shown by figure 8 step (804).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

Art Unit: 2651

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Szita et al.

The teaching of Szita et al. is discussed above and incorporated herein. Claim 3 further sets forth that the STW performs the read and write head with calculations on a "bare" HDA, i.e. one without a controller circuit board. Clearly Szita et al. teaches the use of a STW to perform head width calculations (steps 802-804) independent of the HDA. Therefore the need of a HDA circuit board is not needed. It would have been obvious to one of ordinary skill in the art at the time of the invention to include place "bare" HDA assemblies into the STW to perform head width calculations so that the head width calculations can be performed before the final manufacture stages are performed.

8. Claims 5, 10, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Szita et al. in view of Nunnelley (US 2003/0133217 A1) and Sacks et al. (6,538,838 B1).

The teaching of Szita et al. is discussed above and incorporated herein. Claim 10 further sets forth a manner in which the width of the read head and write head are determined by obtaining amplitude data as the head is displaced across a track. Szita et al. teaches read head and write head width determination but does not disclose the specific way in which this determination is made. Nunnelley teaches a write width

Art Unit: 2651

determination (page 4) and Sacks et al. teaches a read width determination (column 7), both of which are performed in a manner as claimed, It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate well known head width determination processes as taught by Nunnelley and Sacks et al. into the arrangement of Szita et al. since the specific type of process used in Szita et al. was not taught. Therefor any well known technique could have been used. The limitations of claims 5 and 11 set forth no more than discussed above and therefor rejected for similar reasons.

#### ***Allowable Subject Matter***

9. Claims 4, 6 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter: The claimed method as set forth in claim 4/1 and disk arrangement of 9/7 that uses a collection of width measurements is neither taught by nor an obvious variation of the art of record. The claimed method of claim 6/1 that determines track pitch based on a nominal pair of width values as set forth is neither taught by nor an obvious variation of the art of record.

#### ***Conclusion***

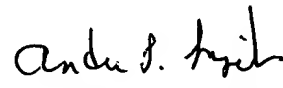
11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lamberts et al. teaches the increase or decreases write inhibit window based on width of a write head.

Art Unit: 2651

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew L. Sniezek whose telephone number is 703-308-1602. The examiner can normally be reached on Mon.-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 703-305-4700. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

  
Andrew L. Sniezek  
Primary Examiner  
Art Unit 2651

A.L.S.  
1/23/04